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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/650,498 | 08/28/2003 | Angelo J. Suitor | 58811US002 | 6967 |
| 32692 | 7590 | 09/07/2006 | EXAMINER | |
| 3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427 | | | LAMB, BRENDA A | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1734 | |

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/650,498 | Applicant(s) SUITOR ET AL. | |
| | Examiner Brenda A. Lamb | Art Unit 1734 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-8,17,18 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8,17,18 and 20-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/12/2006 has been entered.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1,2,4-6,8,17,18, 20-22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruuttu et al (WO 01/38005) in view of Stash et al (US 6,001,425).

Ruuttu et al teach an apparatus for coating a workpiece with a coating solution

comprising a coating chamber in which the workpiece is coated, a coating solution supply container for supplying the coating solution to the coating chamber, a fluid connection fluidly connecting the coating chamber and the coating solution supply container such that coating solution is flowable between the coating chamber and the coating solution supply container wherein the container is positionable to different elevations allowing coating solution to flow from the supply container to the coating chamber and vice versa, from the coating chamber back to the supply container. Ruuttu et al fail to teach the use of a deformable or collapsible bladder type coating solution supply container. However, Stash et al teaches the design of a coating apparatus which includes a coating chamber in which the workpiece is coated and a deformable or collapsible plasma bag or bladder in a supply tank that dispenses the coating directly into a coating chamber which is an alternative to dispensing from a supply tank using a pressure medium to transfer coating by pressurizing and aerating the coating. Therefore, it would have been obvious to one of ordinary skill in the art to provide the deformable or collapsible bladder dispensing supply system as taught by Stash et al in place of the compressed gas supplied to the coating solution in the coating solution supply container(s) of Ruuttu et al since Stash et al teaches the use of a deformable or collapsible bladder dispensing supply system as an alternative to the use of pressurized medium aeration dispensing supply system such as Ruuttu et al supply system which transfers the coating by pressurizing and aerating the coating for the taught advantage of the deformable or collapsible bladder dispensing supply system over pressurized medium aeration dispensing supply system – enable one to transfer the coating without

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aerating the coating thereby obviously reducing the creation bubbles in the coating which in turn increase the uniformity of the coating layer applied to the substrate.

Further, the Ruuttu et al shows in Figure 4 that his apparatus enables coating fluid to flow from the coating chamber back in the direction to the supply container as depicted by the arrows. Stash et al also shows in Figures 10a-10b that coating can flow into and out of the coating supply chamber. With respect to claims 2 and 18, the deformable or collapsible bladder type system as set forth by Stash et al is deemed to be capable of being manually manipulated because the supply system is flexible and non-rigid so as to be collapsible. With respect to claims 4 and 20, the Ruuttu et al apparatus as defined by the combination above results in an apparatus having a supply system mounted for movement between an upper and lower elevation. With respect to claims 8 and 24, the Ruuttu et al apparatus includes a valving mechanism (15) that enables coating fluid to flow from the coating chamber back in the direction to the supply container. With respect to claims 5-6 and 21-22, Stash et al teaches as shown in Figure 10a-10b the plasma bag/supply container is positioned within a housing 26 and positive pressure within the housing is generated within housing obviously via a pressurized gas source such as supply 32 shown in Figures 5a-5b to dispense coating from the plasma bag/supply container and further negative pressure within the housing is generated obviously via a vacuum gas source such as supply 36 shown in Figures 5a-5b to flow the coating back to the plasma bag/supply container from the coating chamber.

Claims 5, 7, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruuttu et al (WO 01/38005) in view of Stash et al (US 6,001,425) as

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applied to claims 1,2,4-6,8,17,18, 20-22 and 24 above, and further in view of Cranskens et al (US 3,296,951).


The teachings of Ruuttu et al and Stash et al are applied for the reasons noted above. Neither Ruuttu et al or Stash et al teach or suggest a mechanism (i.e., plate) for deforming the supply container or bag to move the coating material to the coating chamber and which permits coating material to flow back to the coating supply container or bag. However, it was known in the art, at the time the invention was made, to use a plate to apply pressure to a collapsible or deformable supply bag to supply coating material to a coating chamber and the release of the plate to relieve pressure to enable coating material to flow back into the coating material supply bag as evidenced by Cranskens et al (US 3,296,951). In light of the teachings of Cranskens, it would have been obvious to one of ordinary skill in the art to provide, on a small scale, a pressure supply/release plate in communication with the plasma bag in the Ruuttu coating apparatus as modified in the manner as discussed above in order to enable supply and removal of coating from material from the coating chamber.

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda A. Lamb whose telephone number is (571) 272-1231. The examiner can normally be reached on Monday-Tuesday and Thursday-Friday with alternate Wednesdays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla, can be reached on (571) 272-1231. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Brenda A Lamb
Examiner
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